

## Alaska Scientific Crime Detection Laboratory

## DataMaster Certification Form

Issued: 04/04/2012  
Effective: 04/04/2012

Version: DMCEF2012 R1  
Status: Active

Instrument S/N 100671 Analyst CRF Start Date 4/9/12

Diagnostic Test (attached)

## 1. Voltage Checks

- a. Adjust voltages, if needed
- i. Lamp (2.6V Maximum)
- ii. Bias (80V)
- iii. Cooler (2.0V Maximum)
- iv. Chopper Frequency
- v. Detector Voltage (-0.100V to 0.100V)
- b. Set RFI
- c. Adjust barometer reading to match NIST traceable barometer
- d. Adjust volume setting, if needed (1.5L +/- 0.1L)
- e. Print Technician Screen (attached)

## 2. Print Calibration Factors (attached)

3. Volume Test - Minimum 1600 mL (1.3L to 1.7L)

## 4. Linearity Test (attached)

- a. Levels Used
- i. 0.020g/210L Mnf ILMO Lot 07611020A5 Exp 3/1/13
- ii. 0.040g/210L Mnf ILMO Lot 07611040A4 Exp 3/1/13
- iii. 0.080g/210L Mnf ILMO Lot 07511080A1 Exp 3/1/13
- iv. 0.100g/210L Mnf ILMO Lot 07611100A3 Exp 3/1/13
- v. 0.200g/210L Mnf Guth Lot 11120 Exp 7/19/13
1. Simulator S/N SD1176 Date Calibrated 8/17/11
- vi. 0.300g/210L Mnf Guth Lot 11110 Exp 7/13/13
1. Simulator S/N DR4176 Date Calibrated 2/21/12

## 5. Functional Tests (attached)

- a. Incomplete
- b. Invalid
- c. Interference
- i. Acetone - Mnf Guth Lot 11200 Level 0.080 Exp 10/11/13
1. Simulator S/N SD1199 Date Calibrated 1/11/12
- ii. Isopropanol - Mnf Guth Lot 10280 Level 0.080 Exp 11/17/12
1. Simulator S/N DR6267 Date Calibrated 1/10/12
- iii. Negative Control - Mnf Guth Lot 11250 Level 0.100 Exp 12/6/13
1. Simulator S/N SD1202 Date Calibrated 8/17/11

d. RFI

6. Verify stylus is calibrated
7. Verify card reader is functional
8. Reset Options
9. Clear Memory
10. Verification of Calibration
11. Non-Drinking Subject Test (attached)
12. Upload
13. Update agency information and polling status in DM Host Calling Program

End Date 4/10/12

## DIAGNOSTIC RECORD

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100671  
-----

Date: 04/09/2012  
Time: 14:43:54

VERSIONS  
DMT: 2.00  
PIC: 3.03  
Modem: 2.3  
Questions: 2.2

## TEMPERATURES

Sample Chamber = 48.9°C PASSED  
Breath Tube = 48.0°C PASSED

PUMP INFO  
Flow Rate = 5.122 L/M PASSED

DETECTOR INFO  
PUMP ON PASSED  
PUMP OFF PASSED

FILTER INFO  
Filter 1 PASSED  
Filter 2 PASSED  
Filter 3 PASSED

INTERNAL STANDARD PASSED

Technician Screen

-----  
DATAMASTER dmt: 100671  
-----

Date: 04/09/2012  
Time: 2:51 PM

Temperatures (°C)

Sample Cell: 48.7°C  
Breath Tube: 46.6°C

Current Barometer 30.0 in.  
Volume (Ltr) 1.46

Settings

Lamp: 1.69 V  
Bias: 79 V  
Cooler: 1.66 V  
Chopper: 544 Hz

Voltages (V)

Flow: 1.07 V  
Detector: 0.033 V

CRF  
3/19

CALIBRATION FACTORS

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100671  
-----

Date: 04/09/2012  
Time: 10:19:13

OPERATOR NAME:  
CHARLES FOSTER  
CERTIFICATE #: 7734

Ca = 0.1000  
CAL = 0.981393    0.800 <= CAL < 1.200  
b1 = 0.0003    0.0000 <= b1 < 0.0040  
b2 = 0.0063    0.0010 <= b2 < 0.0100  
b3 = 0.0001    0.0000 <= b3 < 0.0040  
Xq = 0.0987    0.0500 <= Xq < 0.2000  
a21 = 1.187324    1.050 <= a21 < 1.300  
a31 = 0.451266    0.300 <= a31 < 0.800

CF  
4/19

SUBJECT TEST

Alaska Department of Public Safety  
 DATABASE dmt: 100671

Date: 04/09/2012  
 Time: 15:19:45

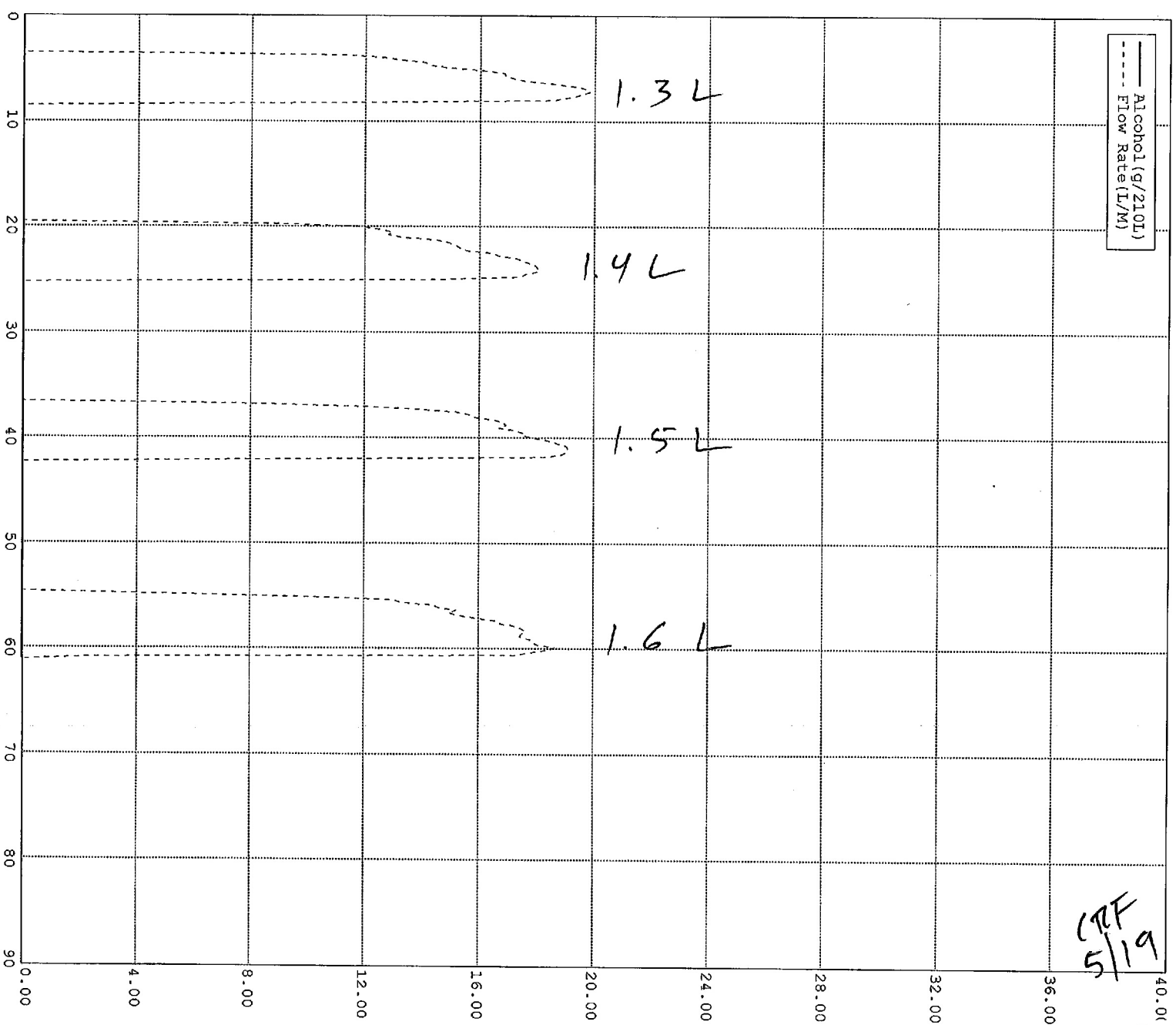
SUBJECT NAME:  
 TEST TEST  
 LICENSE #: XXXX

OPERATOR NAME:  
 MINIMUM VOLUME  
 OPERATOR'S #: XXXX

DEPT/AGENCY:  
 XXXX  
 CASE/REPORT: XXXX  
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.080  
 TARGET AT 30.01: 0.080  
 LOT #: 07511080A1  
 EXPIRATION: 03/01/2013

DIAGNOSTIC CHECK	PASSED	15:20
BLANK TEST	0.000	15:20
INTERNAL STANDARD	VERIFIED	15:21
EXTERNAL STANDARD	0.078	15:21
BLANK TEST	0.000	15:22
SUBJECT SAMPLE	0.000	15:23
BLANK TEST	0.000	15:24
EXTERNAL STANDARD	0.079	15:24
BLANK TEST	0.000	15:25



LINEARITY CHECK

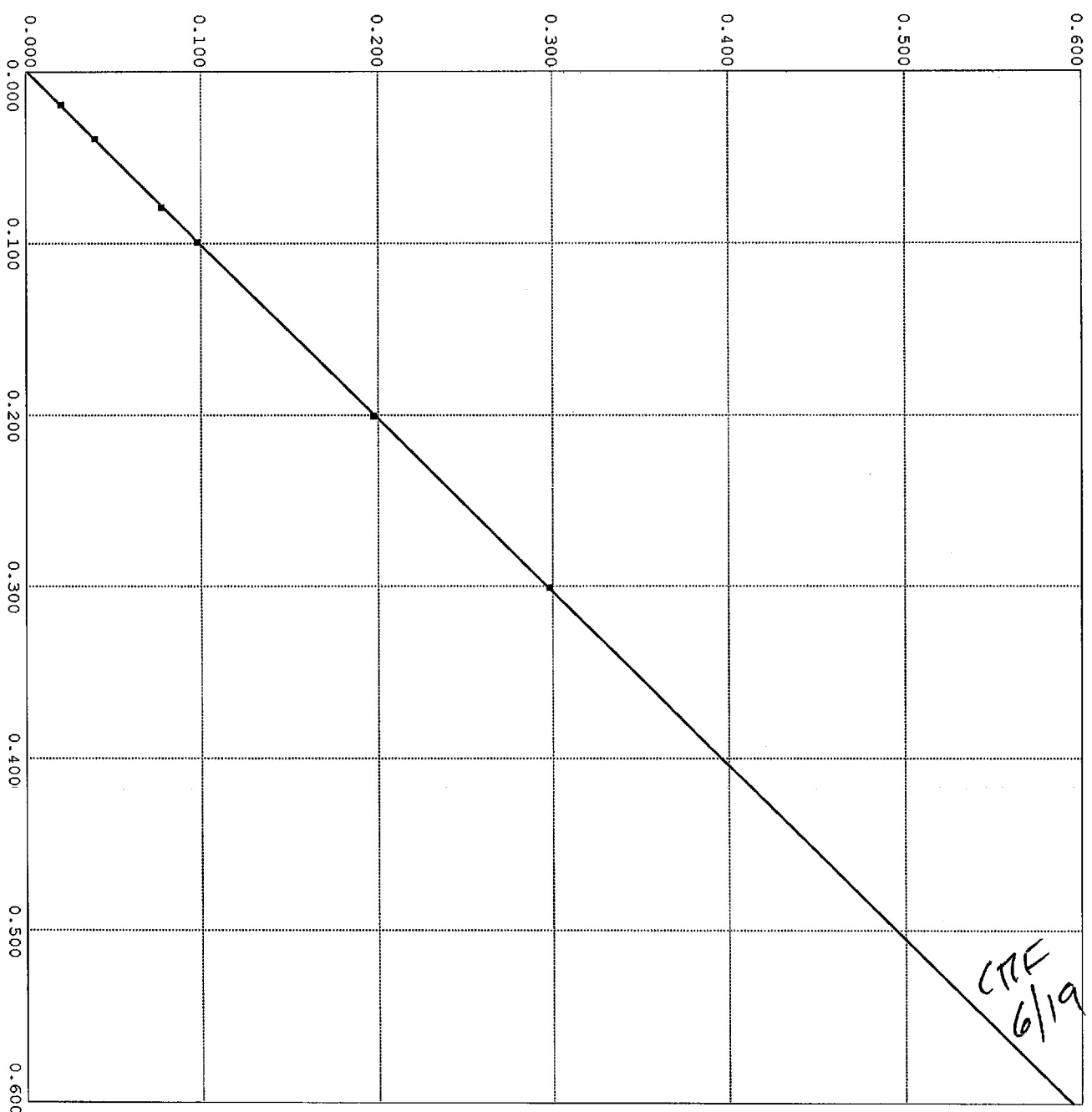
-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100671  
-----

Date: 04/10/2012  
Time: 08:48:56

SUPERVISOR NAME:  
CHARLES FOSTER  
OPERATOR'S #: 7734

TARGET	AVERAGE	STD. DEV.
0.019	0.0204	0.0001
0.039	0.0402	0.0003
0.079	0.0782	0.0002
0.099	0.0990	0.0001
0.200	0.1983	0.0010
0.300	0.2988	0.0005

SLOPE = 0.990424  
R<sup>2</sup> = 0.999949



CFE  
6/19

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
 DATAMASTER dmt: 100671

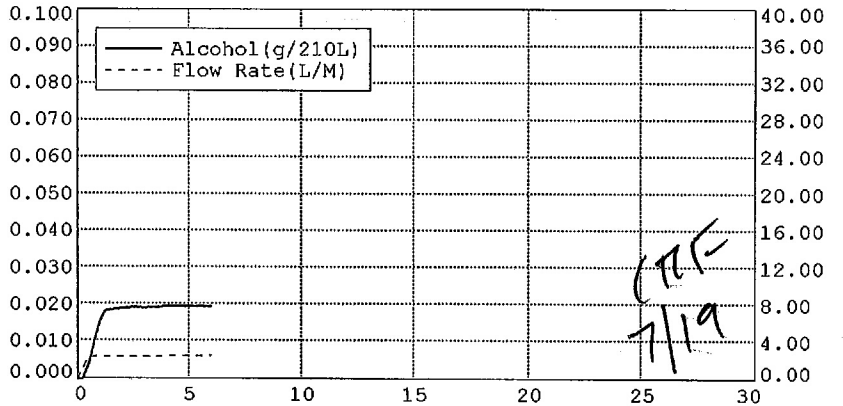
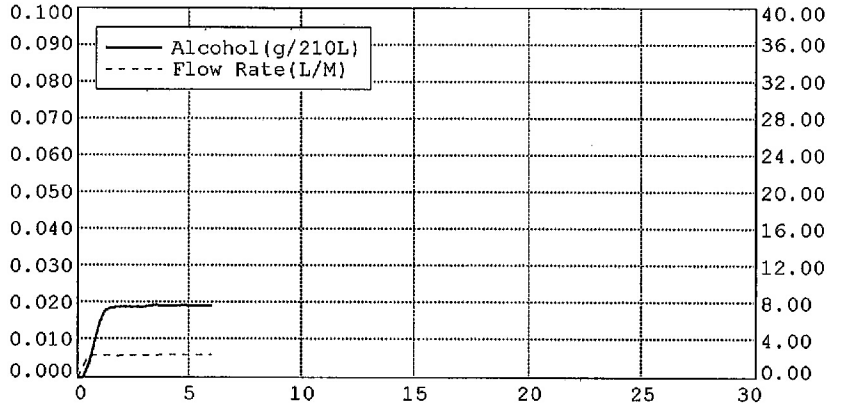
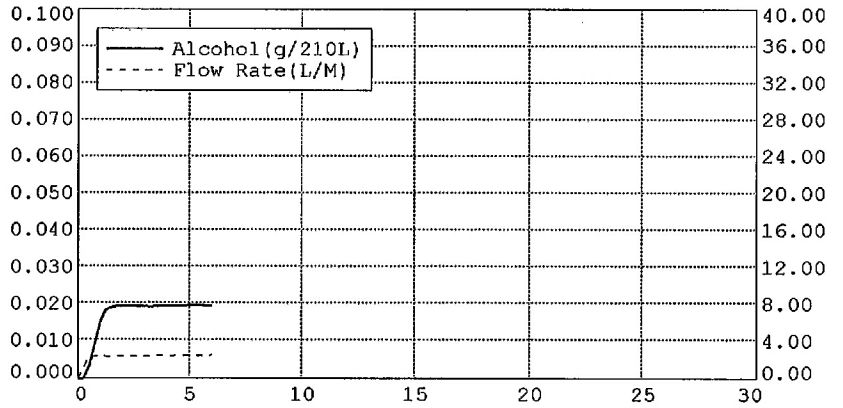
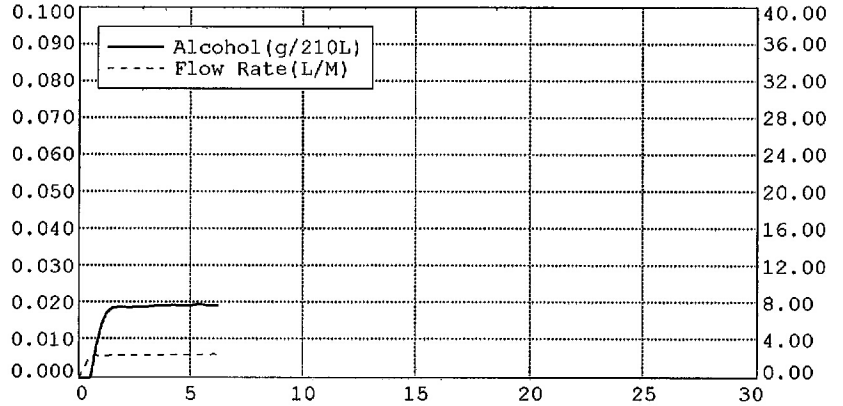
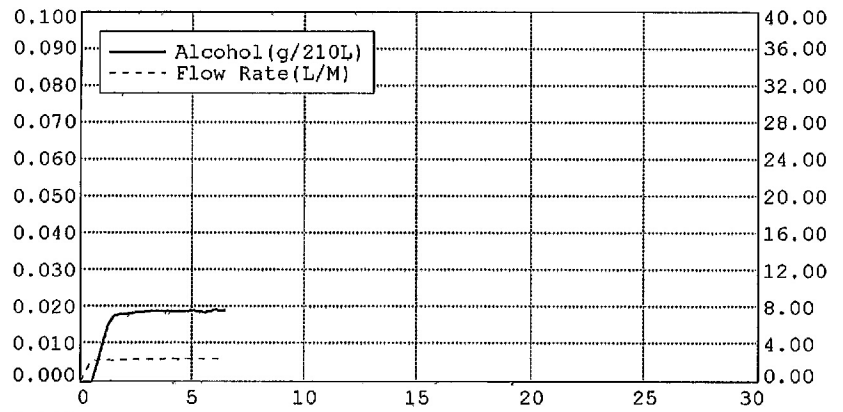
Date: 04/10/2012  
 Time: 08:48:57

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
 TARGET AT 29.78: 0.019  
 LOT #: 07611020A5  
 EXPIRATION: 03/01/2013

BLANK TEST	0.000	08:50
INTERNAL STANDARD	VERIFIED	08:50
EXTERNAL STANDARD	0.020	08:50
BLANK TEST	0.000	08:51
EXTERNAL STANDARD	0.020	08:51
BLANK TEST	0.000	08:52
EXTERNAL STANDARD	0.020	08:52
BLANK TEST	0.000	08:53
EXTERNAL STANDARD	0.020	08:53
BLANK TEST	0.000	08:54
EXTERNAL STANDARD	0.020	08:55
BLANK TEST	0.000	08:55

Average = 0.0204  
 Std Dev = 0.0001



LINEARITY CHECK: Control Test 2

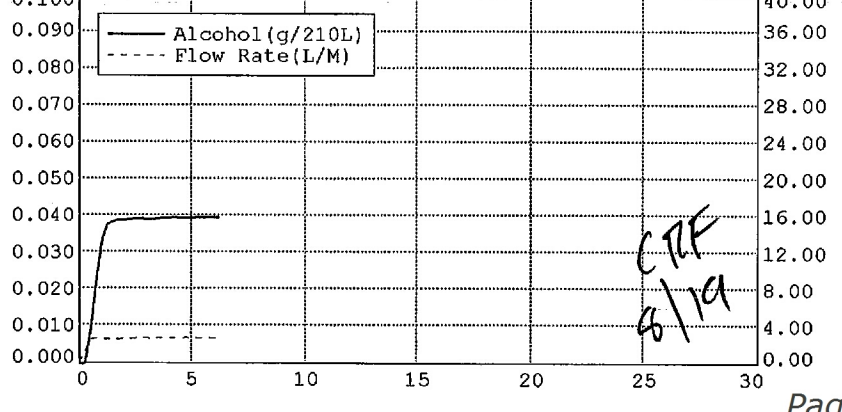
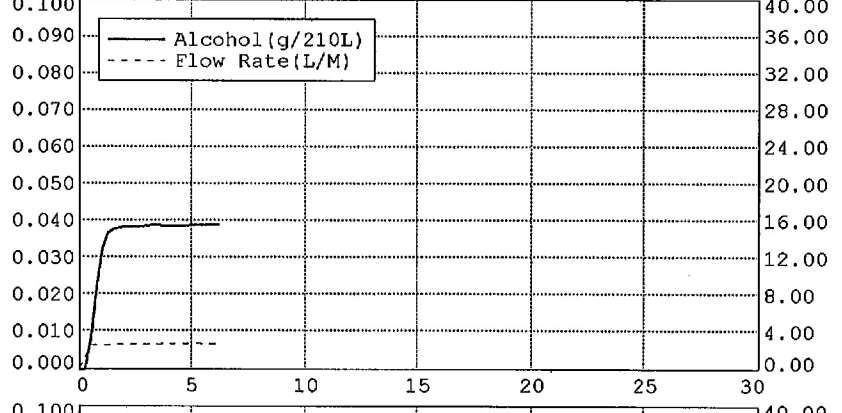
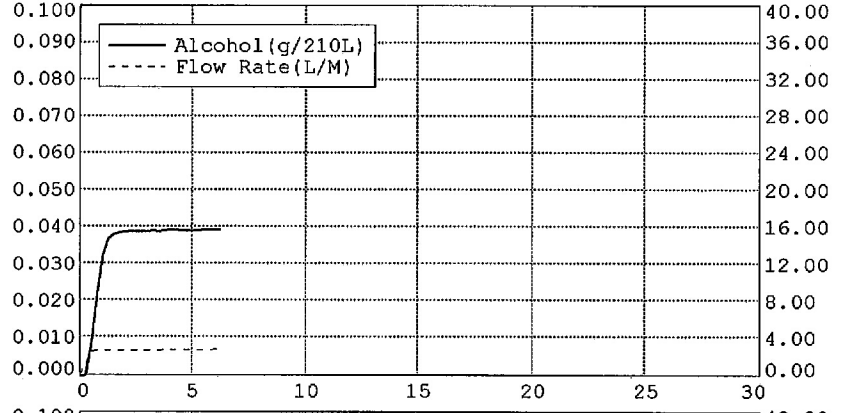
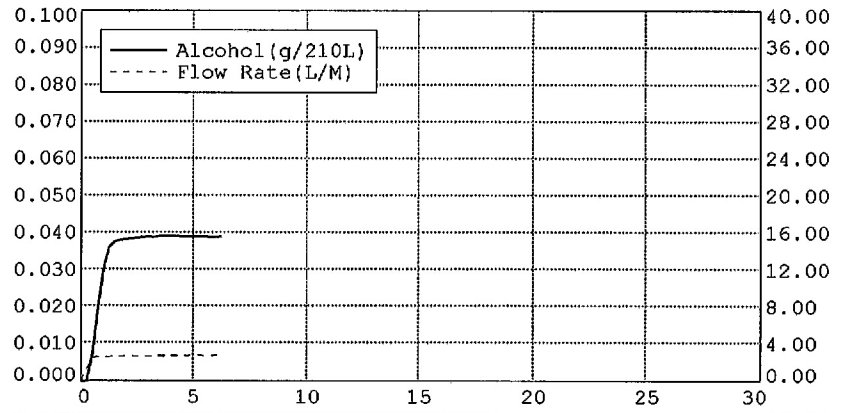
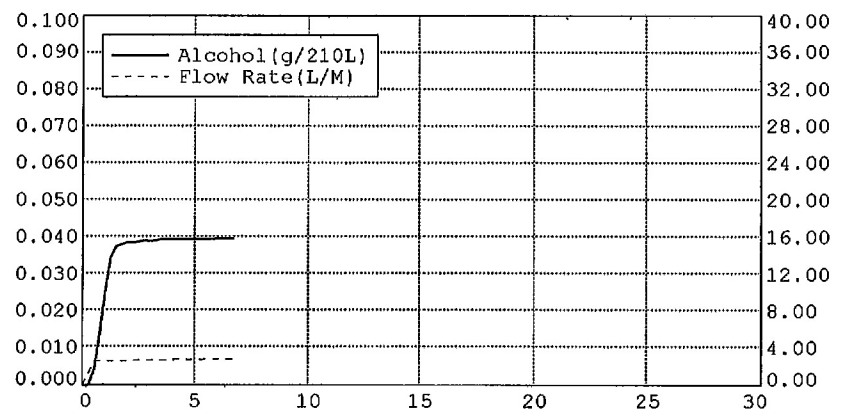
Alaska Department of Public Safety  
 DATAMASTER dmt: 100671

Date: 04/10/2012  
 Time: 08:57:27

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.040  
 TARGET AT 29.78: 0.039  
 LOT #: 07611040A4  
 EXPIRATION: 03/01/2013

BLANK TEST	0.000	08:58
INTERNAL STANDARD	VERIFIED	08:58
EXTERNAL STANDARD	0.040	08:59
BLANK TEST	0.000	09:00
EXTERNAL STANDARD	0.040	09:00
BLANK TEST	0.000	09:01
EXTERNAL STANDARD	0.040	09:01
BLANK TEST	0.000	09:02
EXTERNAL STANDARD	0.039	09:02
BLANK TEST	0.000	09:03
EXTERNAL STANDARD	0.040	09:03
BLANK TEST	0.000	09:04

Average = 0.0402  
 Std Dev = 0.0003





LINEARITY CHECK: Control Test 3

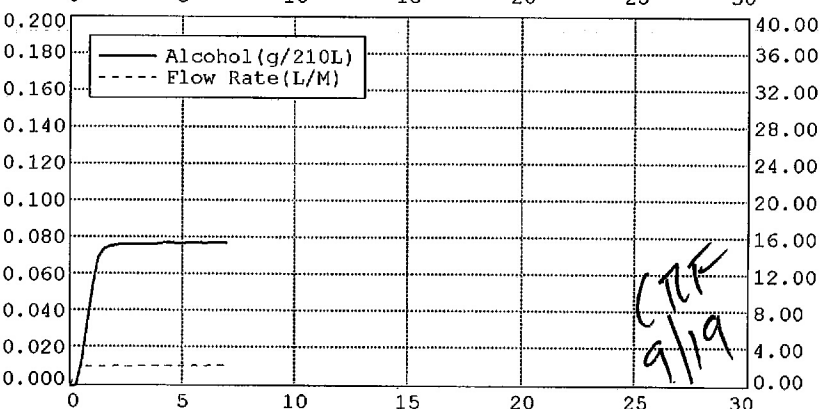
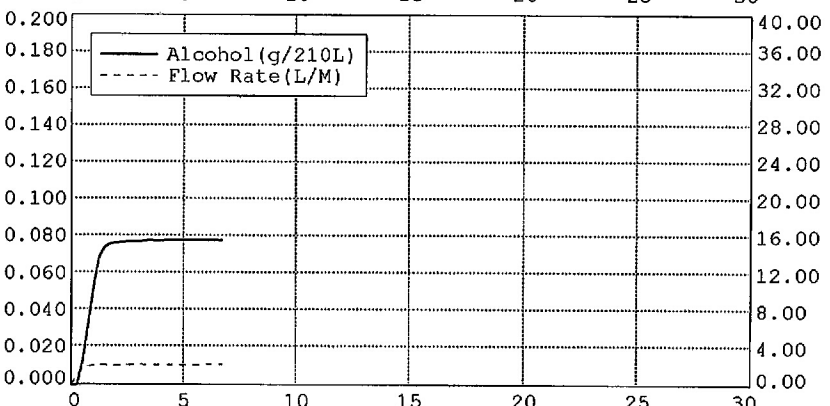
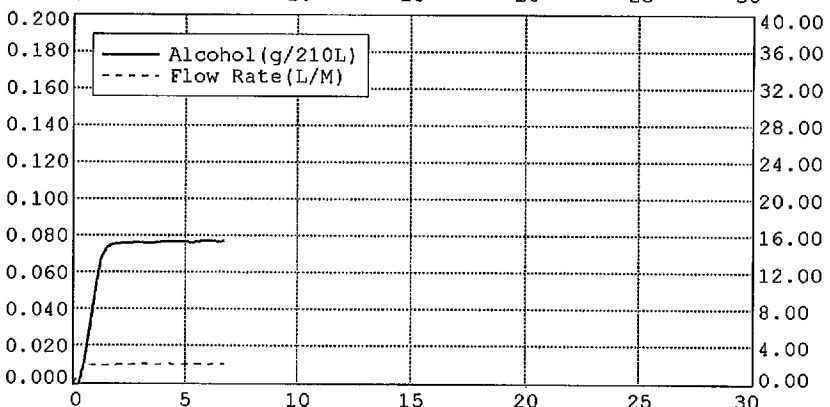
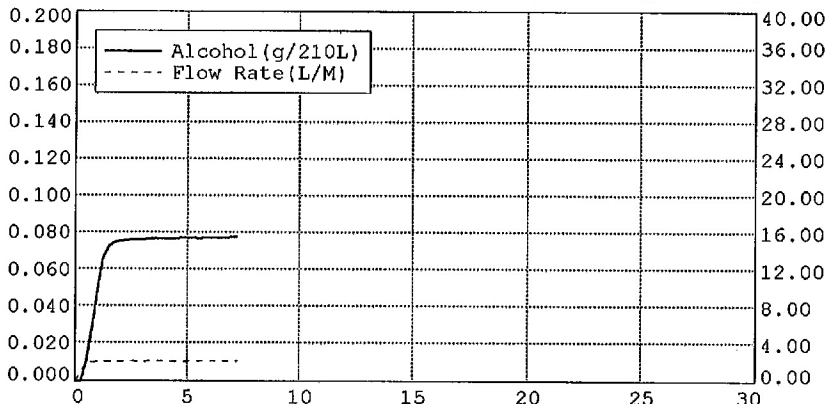
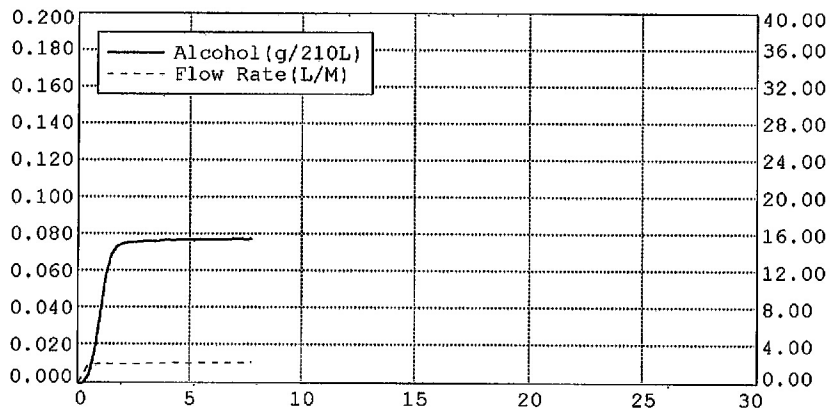
Alaska Department of Public Safety  
 DATAMASTER dmt: 100671

Date: 04/10/2012  
 Time: 09:05:12

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.080  
 TARGET AT 29.78: 0.079  
 LOT #: 07511080A1  
 EXPIRATION: 03/01/2013

BLANK TEST	0.000	09:06
INTERNAL STANDARD	VERIFIED	09:06
EXTERNAL STANDARD	0.078	09:06
BLANK TEST	0.000	09:07
EXTERNAL STANDARD	0.078	09:07
BLANK TEST	0.000	09:08
EXTERNAL STANDARD	0.077	09:09
BLANK TEST	0.000	09:09
EXTERNAL STANDARD	0.078	09:10
BLANK TEST	0.000	09:11
EXTERNAL STANDARD	0.078	09:11
BLANK TEST	0.000	09:12

Average = 0.0782  
 Std Dev = 0.0002



LINEARITY CHECK: Control Test 4

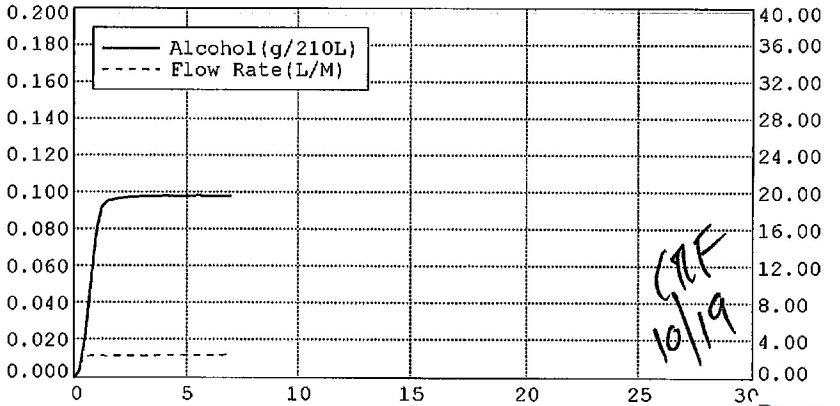
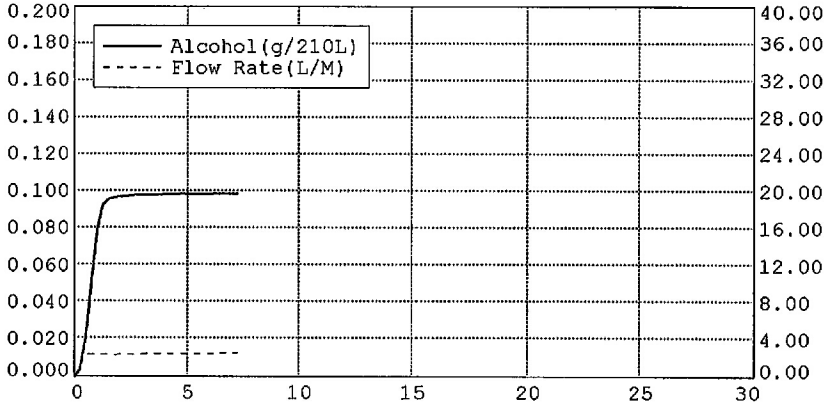
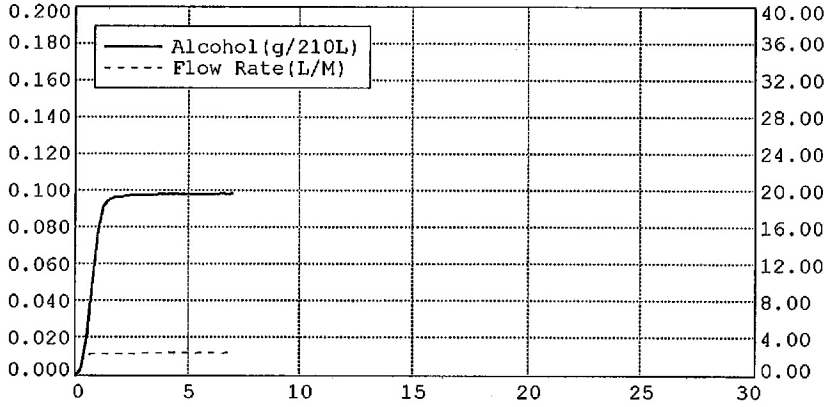
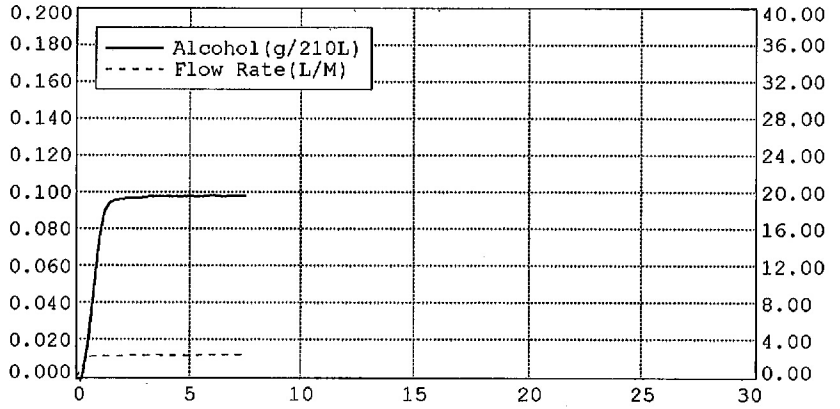
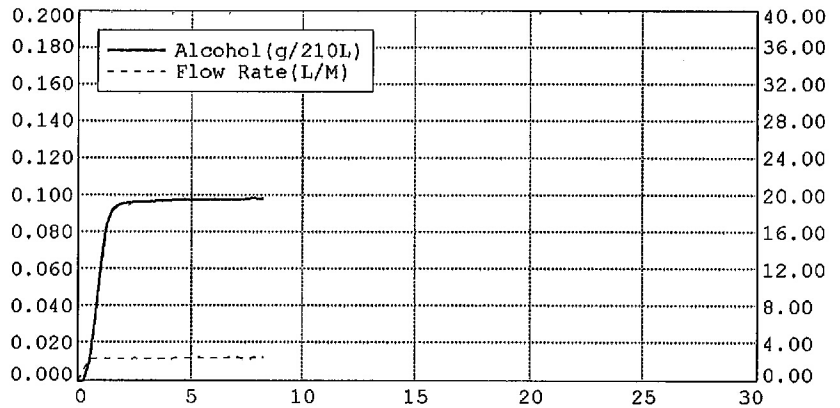
Alaska Department of Public Safety  
 DATAMASTER dmt: 100671

Date: 04/10/2012  
 Time: 09:17:04

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.100  
 TARGET AT 29.78: 0.099  
 LOT #: 07611100A3  
 EXPIRATION: 03/01/2013

BLANK TEST	0.000	09:19
INTERNAL STANDARD	VERIFIED	09:19
EXTERNAL STANDARD	0.098	09:19
BLANK TEST	0.000	09:20
EXTERNAL STANDARD	0.098	09:20
BLANK TEST	0.000	09:21
EXTERNAL STANDARD	0.099	09:22
BLANK TEST	0.000	09:22
EXTERNAL STANDARD	0.099	09:23
BLANK TEST	0.000	09:24
EXTERNAL STANDARD	0.099	09:24
BLANK TEST	0.000	09:25

Average = 0.0990  
 Std Dev = 0.0001



LINEARITY CHECK: Control Test 5

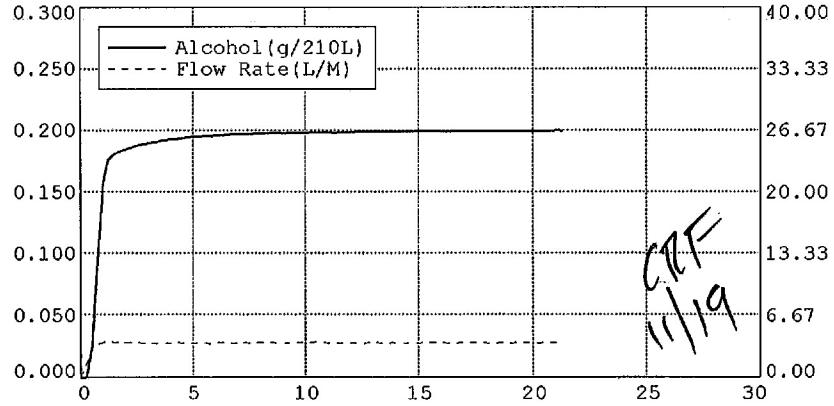
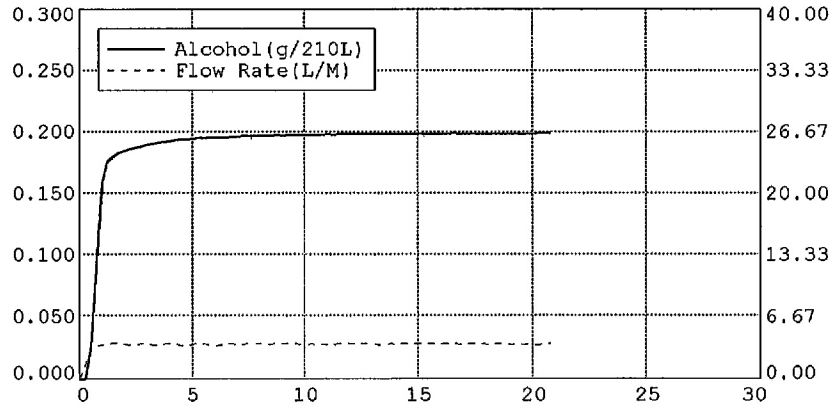
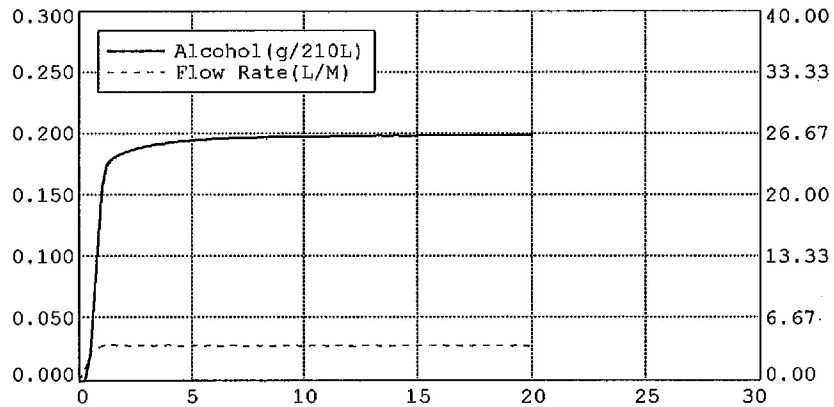
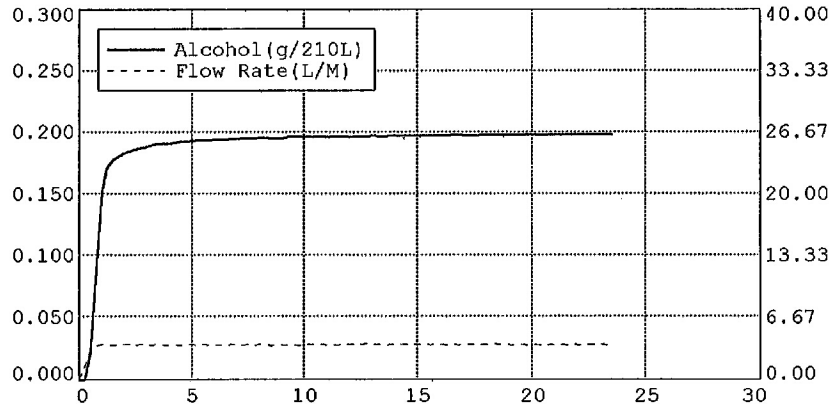
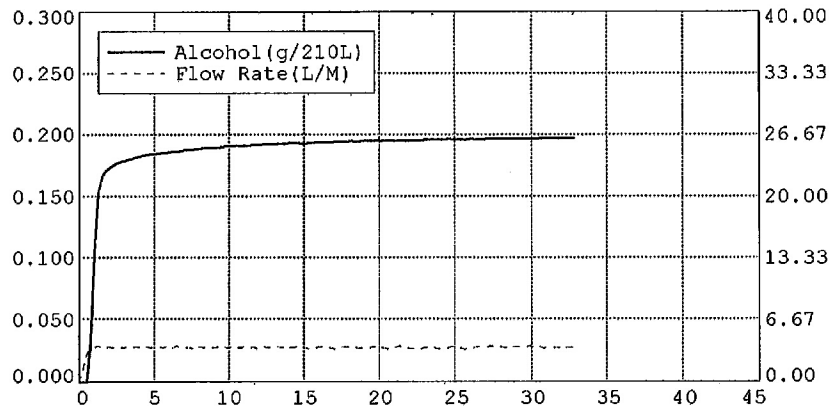
Alaska Department of Public Safety  
 DATAMASTER dmt: 100671

Date: 04/10/2012  
 Time: 09:27:01

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.200  
 LOT #: 11120  
 EXPIRATION: 07/19/2013

BLANK TEST	0.000	09:28
INTERNAL STANDARD	VERIFIED	09:28
EXTERNAL STANDARD	0.196	09:29
BLANK TEST	0.000	09:30
EXTERNAL STANDARD	0.197	09:31
BLANK TEST	0.000	09:31
EXTERNAL STANDARD	0.199	09:32
BLANK TEST	0.000	09:33
EXTERNAL STANDARD	0.198	09:33
BLANK TEST	0.000	09:34
EXTERNAL STANDARD	0.199	09:35
BLANK TEST	0.000	09:36

Average = 0.1983  
 Std Dev = 0.0010



LINEARITY CHECK: Control Test 6

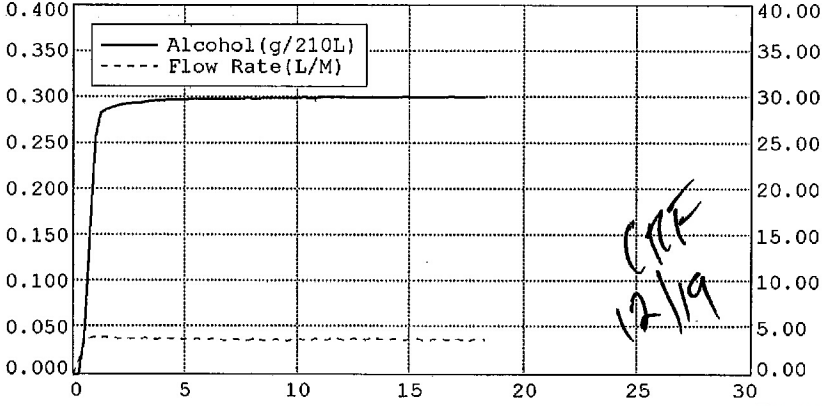
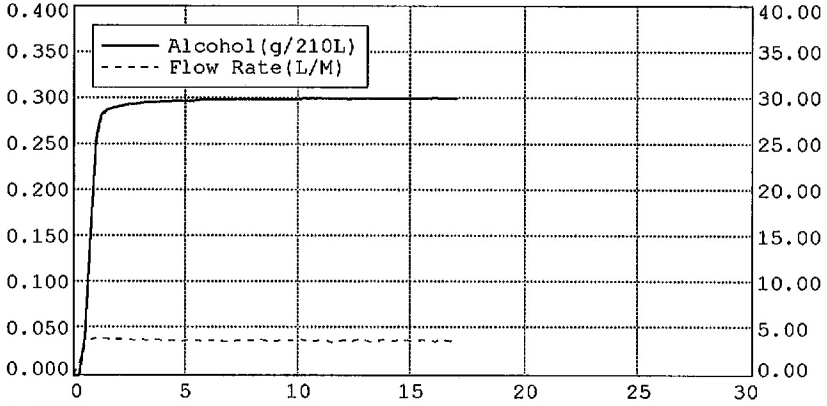
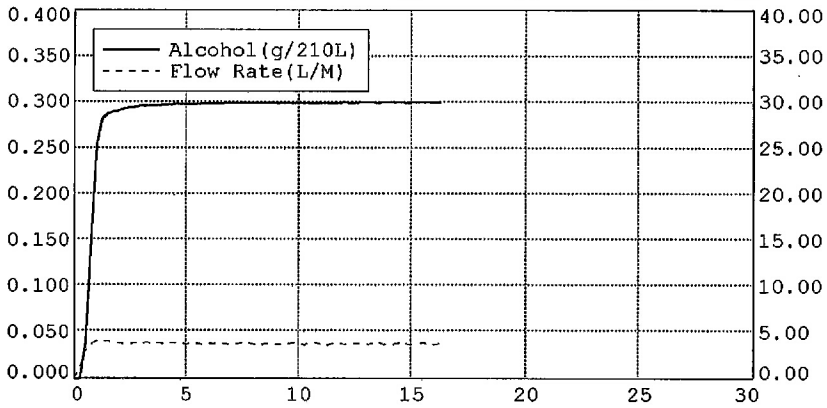
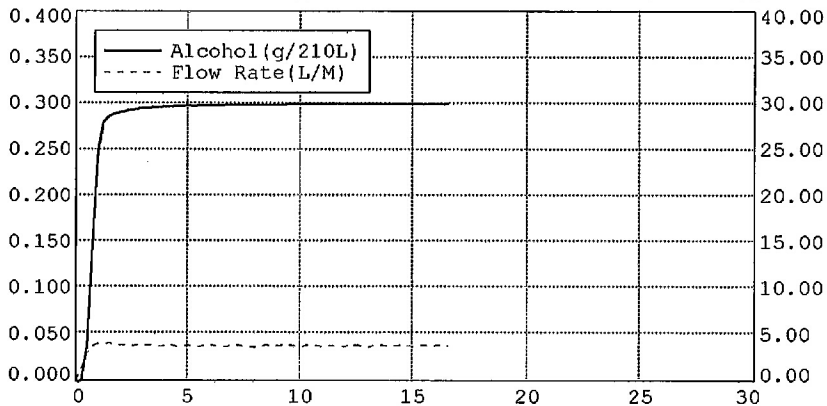
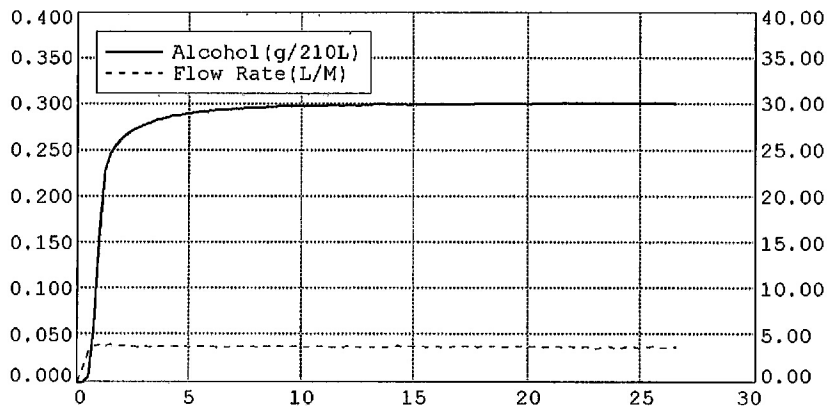
Alaska Department of Public Safety  
 DATAMASTER dmt: 100671

Date: 04/10/2012  
 Time: 09:39:40

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.300  
 LOT #: 11110  
 EXPIRATION: 07/13/2013

BLANK TEST	0.000	09:40
INTERNAL STANDARD	VERIFIED	09:40
EXTERNAL STANDARD	0.299	09:41
BLANK TEST	0.000	09:42
EXTERNAL STANDARD	0.298	09:42
BLANK TEST	0.000	09:43
EXTERNAL STANDARD	0.298	09:44
BLANK TEST	0.000	09:45
EXTERNAL STANDARD	0.298	09:45
BLANK TEST	0.000	09:46
EXTERNAL STANDARD	0.299	09:46
BLANK TEST	0.000	09:47

Average = 0.2988  
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100671

Date: 04/10/2012  
Time: 10:32:27

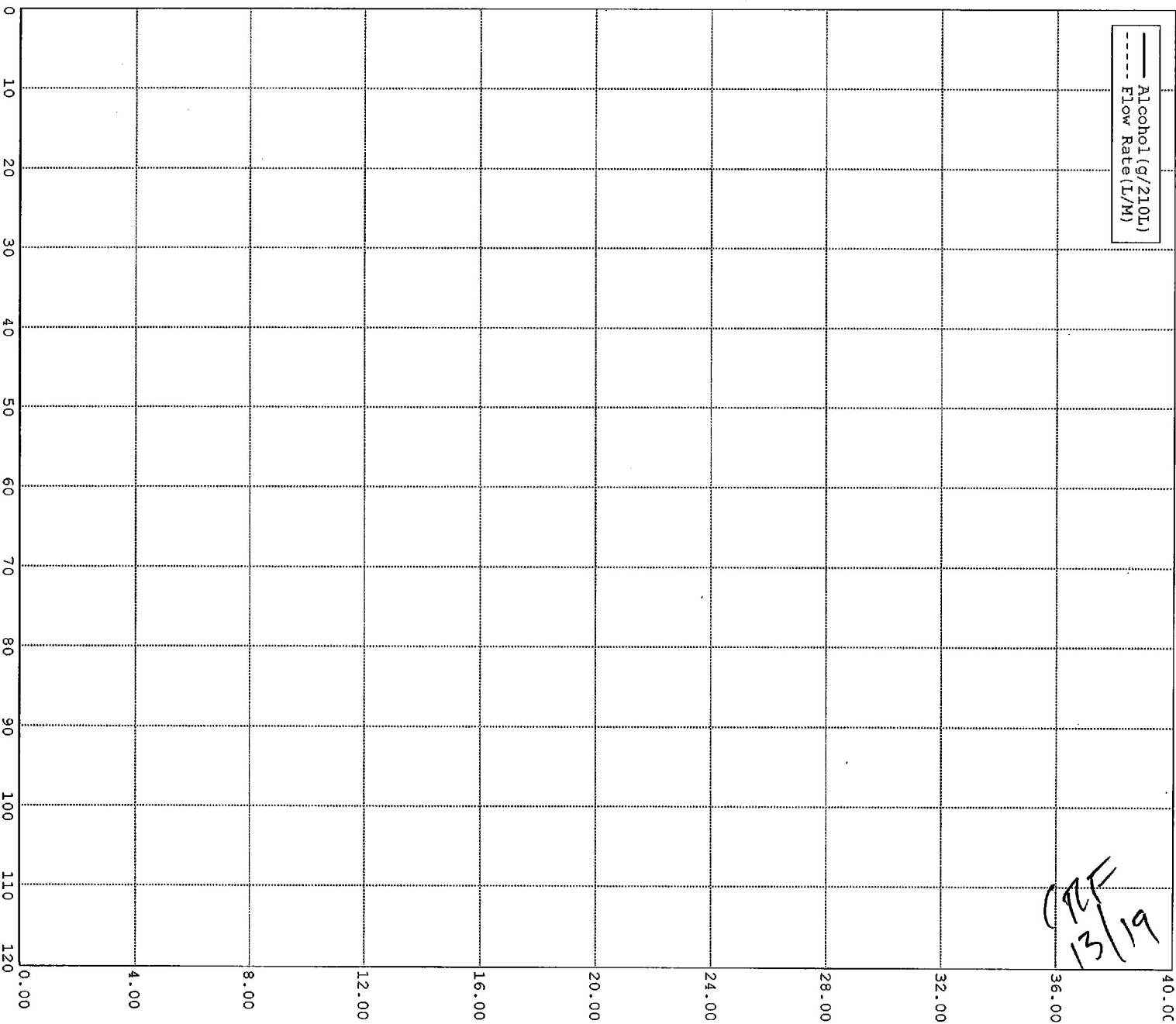
SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
INCOMPLETE XXXX  
OPERATOR'S #: XXXX

DEPT/AGENCY:  
XXXX  
CASE/REPORT: XXXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.77: 0.079  
LOT #: 07511080A1  
EXPIRATION: 03/01/2013

DIAGNOSTIC CHECK	PASSED	10:33
BLANK TEST	0.000	10:33
INTERNAL STANDARD	VERIFIED	10:33
EXTERNAL STANDARD	0.079	10:33
BLANK TEST	0.000	10:34
SUBJECT SAMPLE	INCOMPLETE	10:36



SUBJECT TEST

Alaska Department of Public Safety  
DATA MASTER dmt: 100671

Date: 04/10/2012  
Time: 10:42:14

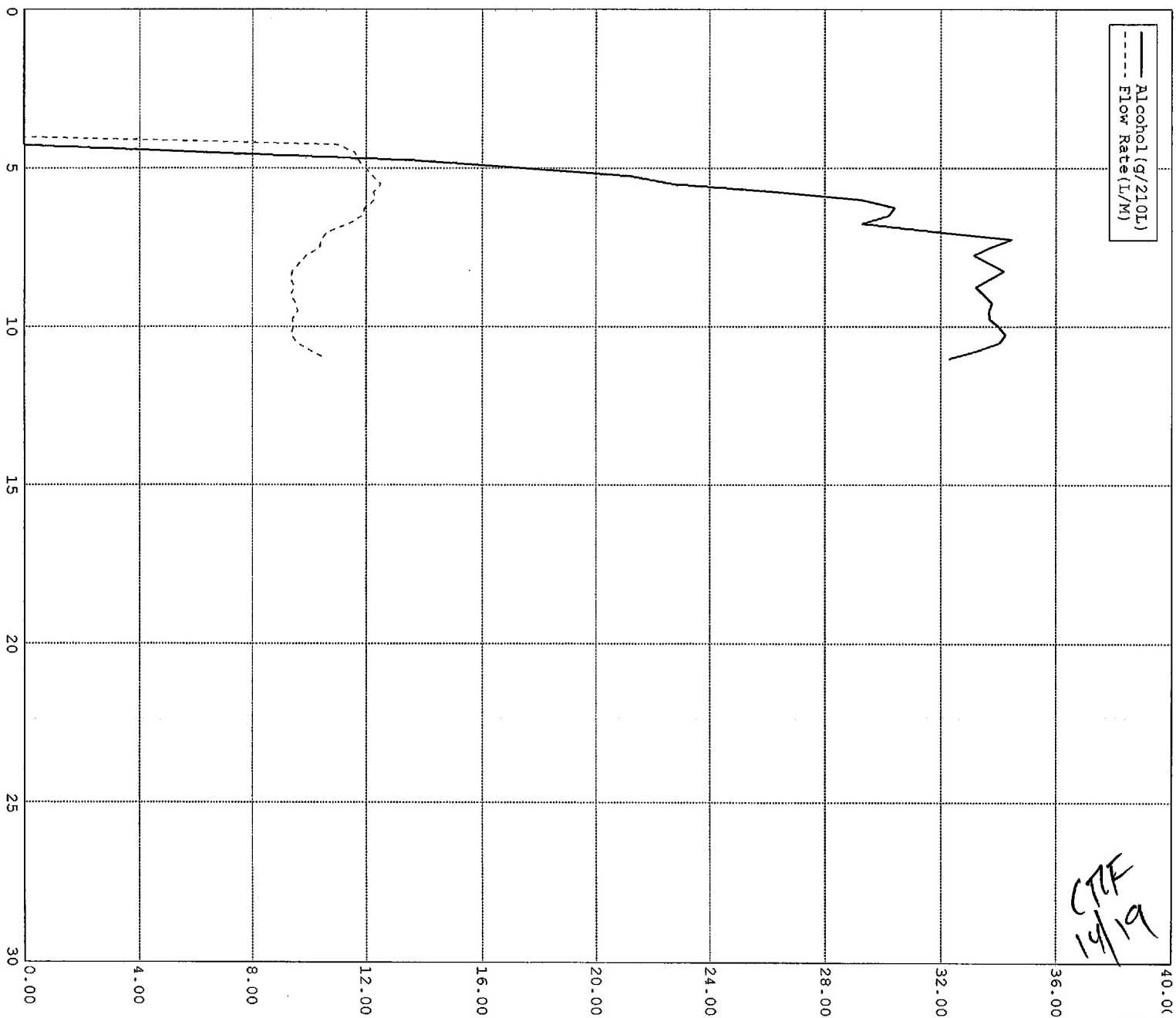
SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
INVALID MOUTH ETOH  
OPERATOR'S #: XXXX

DEPT/AGENCY:  
XXXX  
CASE/REPORT: XXXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.77: 0.079  
LOT #: 07511080A1  
EXPIRATION: 03/01/2013

DIAGNOSTIC CHECK	PASSED	10:45
BLANK TEST	0.000	10:46
INTERNAL STANDARD	VERIFIED	10:46
EXTERNAL STANDARD	0.078	10:46
BLANK TEST	0.000	10:47
SUBJECT SAMPLE	INVALID	10:47



SUBJECT TEST

Alaska Department of Public Safety  
 DATAMASTER dmt: 100671

Date: 04/10/2012  
 Time: 11:19:26

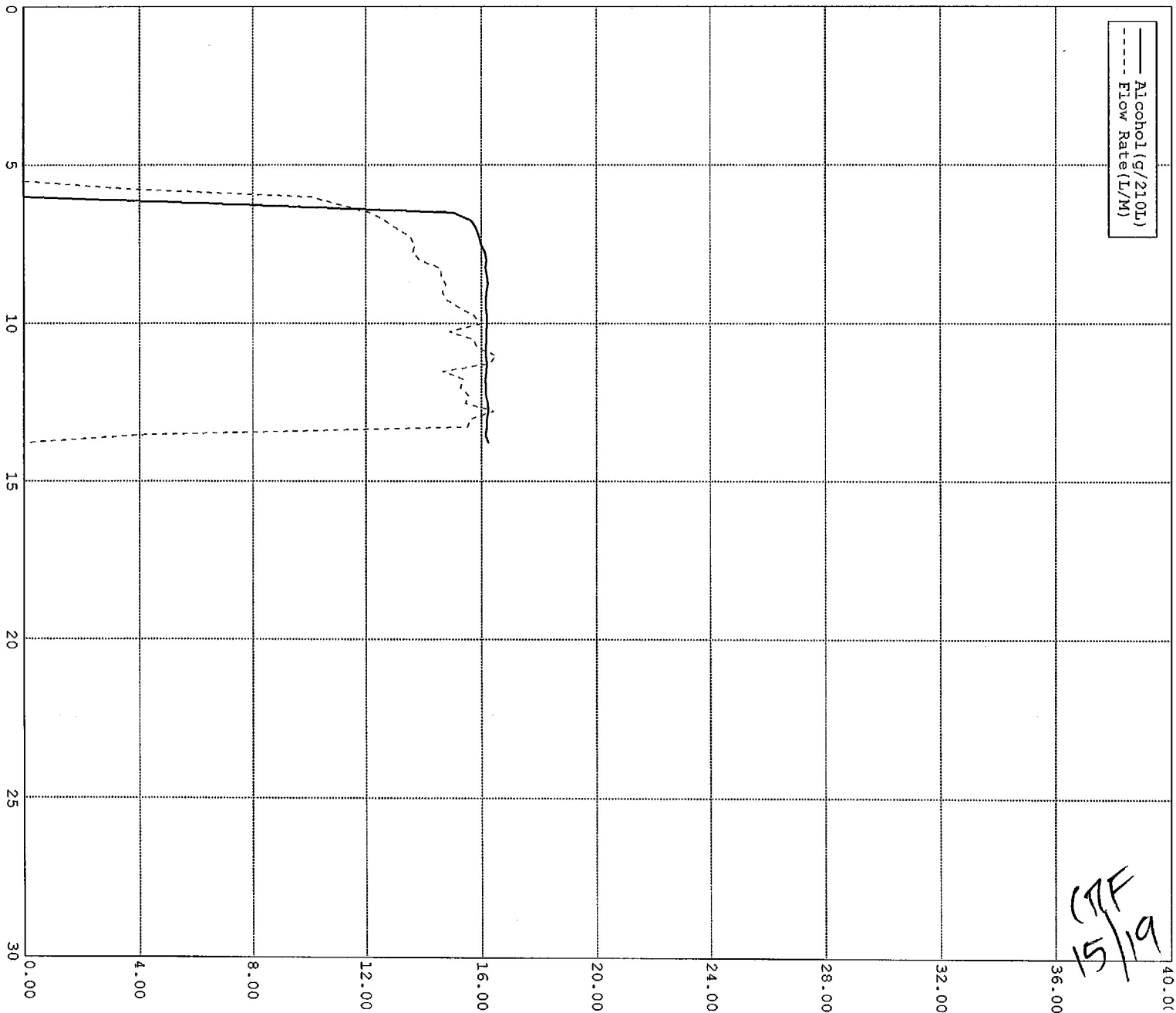
SUBJECT NAME:  
 TEST TEST  
 LICENSE #: XXXX

OPERATOR NAME:  
 INTERFERENCE EPOH AND ACETONE  
 OPERATOR'S #: XXXX

DEPT/AGENCY:  
 XXXX  
 CASE/REPORT: XXXX  
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.080  
 TARGET AT 29.76: 0.079  
 LOT #: 07511080A1  
 EXPIRATION: 03/01/2013

DIAGNOSTIC CHECK PASSED 11:25  
 BLANK TEST 0.000 11:26  
 INTERNAL STANDARD VERIFIED 11:26  
 Xq = 0.099 (0.53%) 0.079 11:26  
 EXTERNAL STANDARD 0.0008 (0.0008)  
 X[1] = 0.0791 (-0.0016) 0.000 11:27  
 BLANK TEST 0.000 11:27  
 SUBJECT SAMPLE INTERFERENCE 11:27  
 X[1] = 0.0812 (-0.0137) (-0.0001)



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmtc: 100671

Date: 04/10/2012  
Time: 11:41:53

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

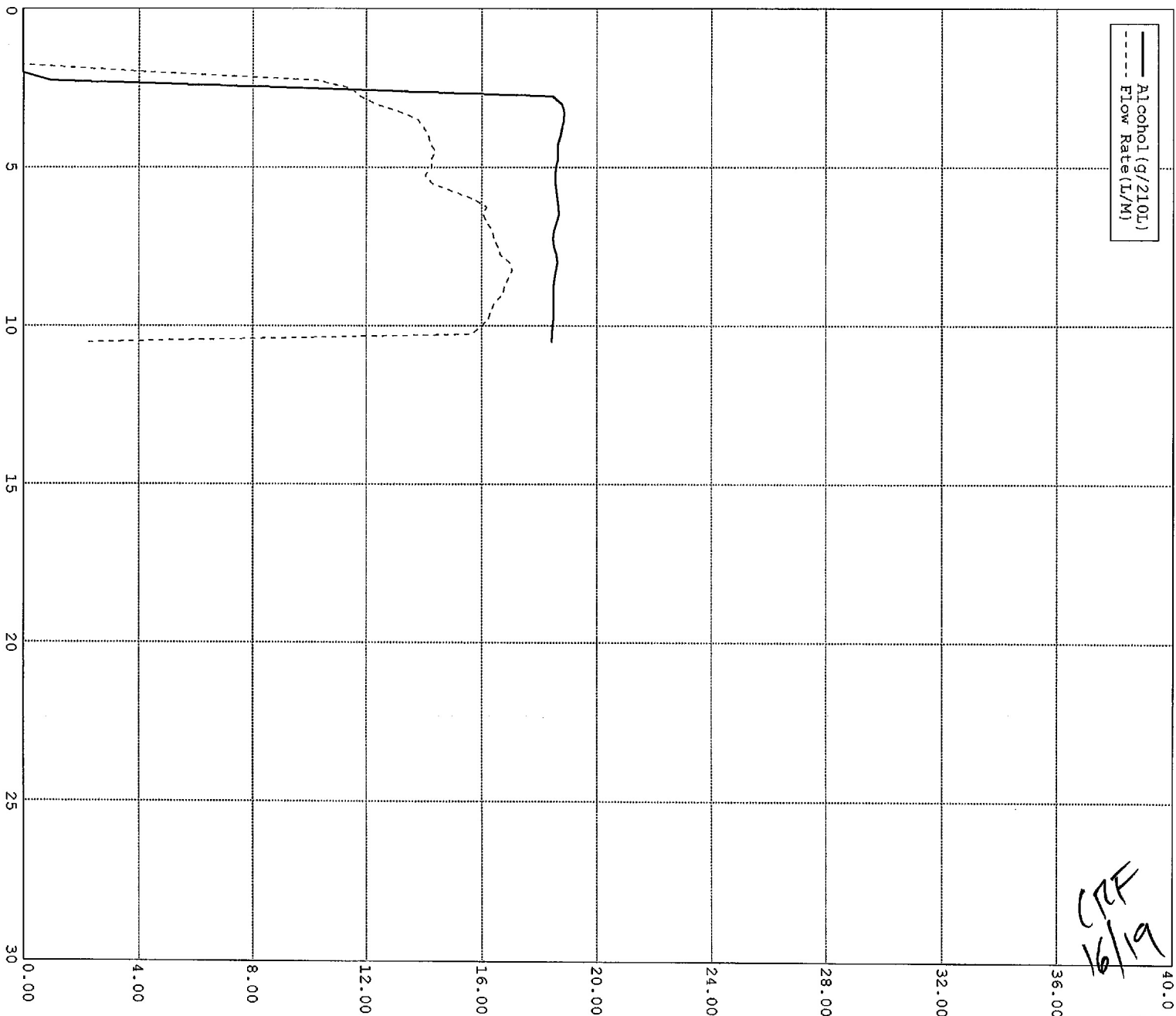
OPERATOR NAME:  
INTERFERENCE FTOH AND IPA  
OPERATOR'S #: XXXX

DEPT/AGENCY:  
XXXX  
CASE/REPORT: XXXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.75: 0.079  
LOT #: 07511080A1  
EXPIRATION: 03/01/2013

DIAGNOSTIC CHECK	PASSED	11:44
BLANK TEST	0.000	11:44
INTERNAL STANDARD	VERIFIED	11:44
Xd = 0.098 (0.44%)	0.078	11:44
EXTERNAL STANDARD	X[1] = 0.0788 (-0.0018) (0.0021)	
BLANK TEST	0.000	11:45
SUBJECT SAMPLE	INTERFERENCE	11:45
X[1] = 0.0931 (-0.0246) (0.0014)		





SUBJECT TEST

Alaska Department of Public Safety  
 DATAMASTER dmt: 100671

Date: 04/10/2012  
 Time: 13:39:13

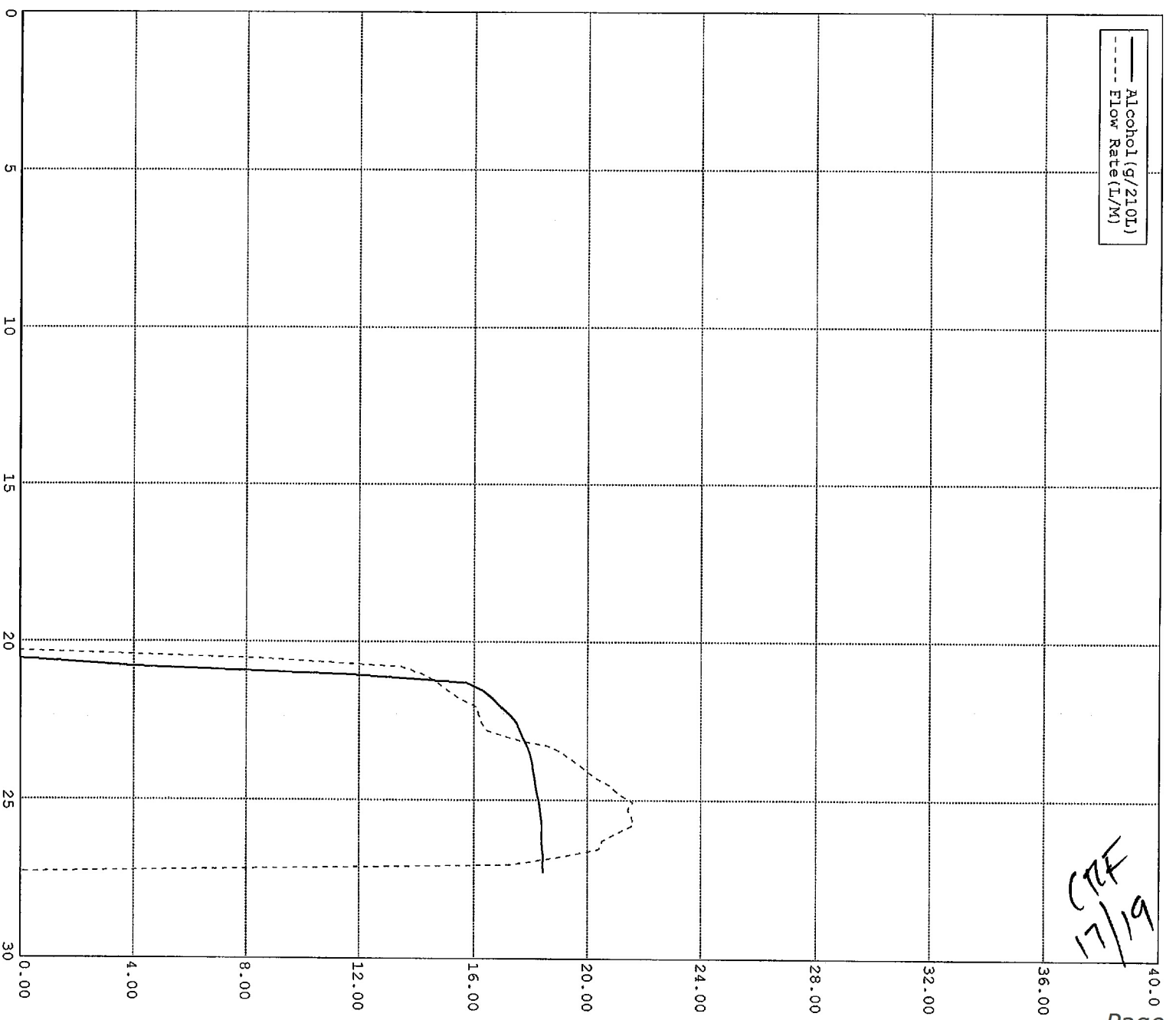
SUBJECT NAME:  
 TEST TEST  
 LICENSE #: XXXX

OPERATOR NAME:  
 INTERFERENCE ETOH ONLY  
 OPERATOR'S #: XXXX

DEPT/AGENCY:  
 XXXX  
 CASE/REPORT: XXXX  
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.080  
 TARGET AT 29.71: 0.079  
 LOT #: 07511080A1  
 EXPIRATION: 03/01/2013

DIAGNOSTIC CHECK	PASSED	13:45
BLANK TEST	0.000	13:45
INTERNAL STANDARD	VERIFIED	13:45
Xg = 0.099 (0.09%)		
EXTERNAL STANDARD	0.078	13:45
X[1] = 0.0785 (-0.0031)	(0.0012)	
BLANK TEST	0.000	13:46
SUBJECT SAMPLE (Vol=2.04L)	0.092	13:47
X[1] = 0.0927 (-0.0006)	(-0.0004)	
BLANK TEST	0.000	13:48
EXTERNAL STANDARD	0.078	13:48
X[1] = 0.0780 (-0.0022)	(0.0008)	
BLANK TEST	0.000	13:49



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100671

Date: 04/10/2012  
Time: 13:58:43

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

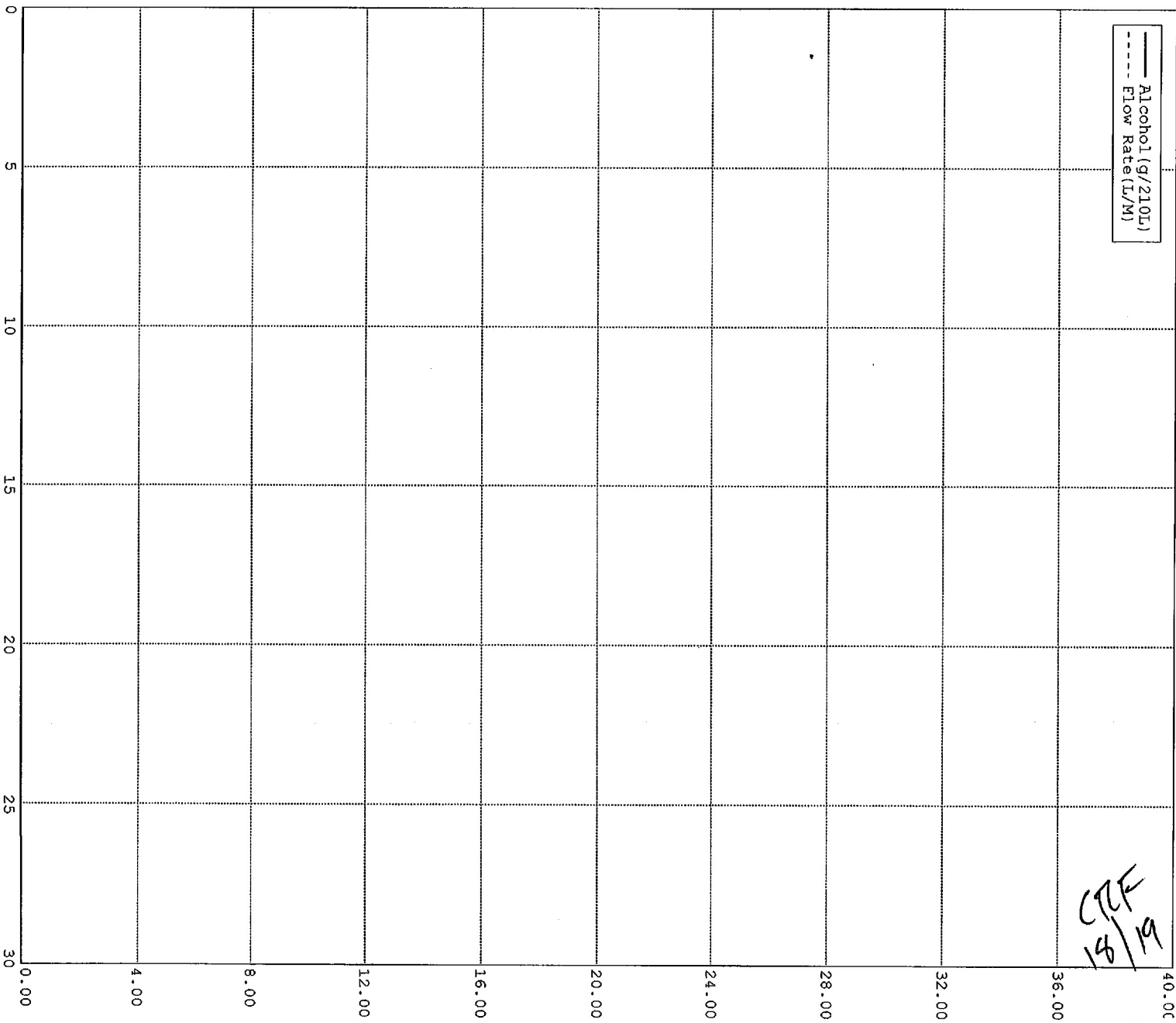
OPERATOR NAME:  
RFI XXXX  
OPERATOR'S #: XXXX

DEPT/AGENCY:  
XXXX  
CASE/REPORT: XXXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.71: 0.079  
LOT #: 07511080A1  
EXPIRATION: 03/01/2013

DIAGNOSTIC CHECK	PASSED	13:59
BLANK TEST	0.000	13:59
INTERNAL STANDARD	VERIFIED	13:59
EXTERNAL STANDARD	0.078	14:00
BLANK TEST	0.000	14:01

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety  
 DATAMASTER dmt: 100671

Date: 04/10/2012  
 Time: 14:28:38

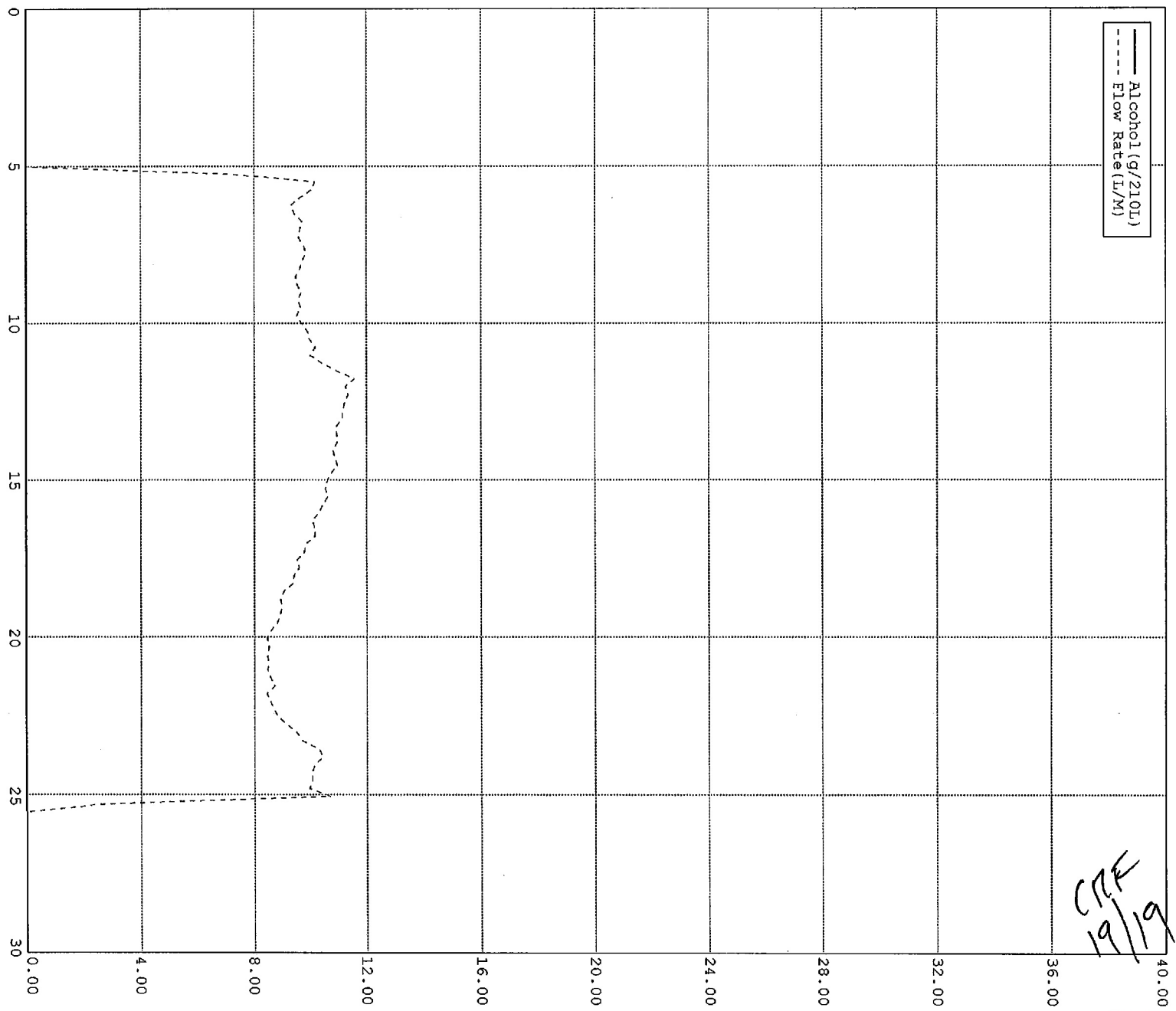
SUBJECT NAME:  
 TEST TEST  
 LICENSE #: XXXX

OPERATOR NAME:  
 CHARLES FOSTER  
 OPERATOR'S #: 7734

DEPT/AGENCY:  
 XXXX  
 CASE/REPORT: XXXX  
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.080  
 TARGET AT 29.70: 0.079  
 LOT #: 07511080A1  
 EXPIRATION: 03/01/2013

DIAGNOSTIC CHECK	PASSED	14:33
BLANK TEST	0.000	14:33
INTERNAL STANDARD	VERIFIED	14:34
EXTERNAL STANDARD	0.078	14:34
BLANK TEST	0.000	14:35
SUBJECT SAMPLE	0.000	14:35
BLANK TEST	0.000	14:36
EXTERNAL STANDARD	0.079	14:36
BLANK TEST	0.000	14:37



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Final page for report

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11/19/2013